Amendments to the Claims

The following claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) An isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence at least 95% identical to the amino acid sequence of SEQ ID NO:2.

2. (original) The isolated nucleic acid molecule of claim 1, wherein said nucleic acid molecule encodes a polypeptide that binds rapamycin.

3. (original) The isolated nucleic acid molecule of claim 1, wherein said nucleic acid molecule encodes a polypeptide at least 98% identical to the amino acid sequence of SEQ ID NO:2.

4. (original) The nucleic acid molecule of claim 1, wherein said molecule hybridizes under stringent conditions to a nucleic acid sequence complementary to a nucleic acid molecule comprising nucleotides 1-3486 of SEQ ID NO:1.

5. (original) The isolated nucleic acid molecule of claim 1, wherein said nucleic acid molecule encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2.

6. (original) The isolated nucleic acid molecule of claim 1, wherein said nucleic acid molecule comprises nucleotides 1-3486 of SEQ ID NO:1.

7. (original) A vector comprising the nucleic acid molecule of claim 1.

8. (original) A cell including the vector of claim 7.

9. (original) A substantially purified polypeptide comprising an amino acid sequence at least 95% identical to the amino acid sequence of SEQ ID NO:2.

10. (original) The polypeptide of claim 9, wherein said polypeptide binds rapamycin.

11. (original) The polypeptide of claim 9, wherein the amino acid sequence of said polypeptide is at least 98% identical to the amino acid sequence of SEQ ID NO:2.

12. (original) The polypeptide of claim 9, wherein the amino acid sequence of said polypeptide is at least 99% identical to the amino acid sequence of SEQ ID NO:2.

13. (original) The polypeptide of claim 9, wherein the amino acid sequence of said polypeptide comprises the amino acid sequence of SEQ ID NO:2.

14. (original) The polypeptide of claim 9, wherein the amino acid sequence of said polypeptide consists of the amino acid sequence of SEQ ID NO:2.

15. (original) A fusion polypeptide comprising the polypeptide of claim 9 operably linked to a non-BFLP1698 polypeptide.

16. (original) The fusion polypeptide of claim 9, wherein said non-BFLP1698 polypeptide comprises at least one member selected from the group consisting of an Fc region of an immunoglobulin molecules or a FLAG epitope, a HIS tag, and a MYC tag.

17. (original) A polypeptide comprising a rapamycin-binding domain of the amino acid sequence of SEQ ID NO:2.

18. (currently amended) A polypeptide at least 993 amino acids in length comprising at least five contiguous amino acids of SEQ ID NO:2, provided that said polypeptide comprises an [[an]] amino acid sequence other than SEQ ID NO:21 ~~SEQ ID NO:22~~.

19. (original) The polypeptide of claim 18, wherein said polypeptide comprises a rapamycin-binding domain.

20. (currently amended) A polypeptide comprising at least five contiguous amino acids of SEQ ID NO:15 ~~SEQ ID NO:16~~.

21. (original) The polypeptide of claim 20, wherein said polypeptide comprises a rapamycin-binding domain.

22. (original) The polypeptide of claim 20, wherein said polypeptide is at least 50 amino acids in length.

23. (original) The polypeptide of claim 20, wherein said polypeptide is at least 100 amino acids in length.

24. (original) The polypeptide of claim 20, wherein said polypeptide is at least 220 amino acids in length.

25. (original) A pharmaceutical composition comprising the polypeptide of claim 17 and a pharmaceutically acceptable carrier.

26. (original) A fusion polypeptide comprising a rapamycin-binding domain of a BFLP1698 polypeptide operably linked to a non-BFLP1698 polypeptide.

27. (original) The fusion polypeptide of claim 26, wherein said non-BFLP1698 polypeptide comprises at least one member selected from the group consisting of an Fc region of an immunoglobulin molecules or a FLAG epitope, a HIS tag, and a MYC tag.

28. (original) A pharmaceutical composition comprising the fusion polypeptide of claim 26 and a pharmaceutically acceptable carrier.

29. (original) An antibody that binds selectively to the polypeptide of claim 9.

30. (original) The antibody of claim 29, wherein said antibody inhibits binding of a BFLP1698 polypeptide to rapamycin.

31. (original) The antibody of claim 29, wherein said antibody is a polyclonal antibody.

32. (original) The antibody of claim 29, wherein said antibody is a monoclonal antibody.

33. (original) The monoclonal antibody of claim 32, wherein said monoclonal antibody is selected from the group consisting of a murine monoclonal antibody, and a humanized monoclonal antibody.

34. (original) A method of producing a BFLP1698 polypeptide, said method comprising culturing a cell including the nucleic acid molecule of claim 1 under conditions allowing for expression of a BFLP1698 polypeptide encoded by said nucleic acid molecule.

35. (original) A method of detecting the presence of a BFLP1698 nucleic acid molecule in a biological sample, the method comprising:

contacting the sample with a nucleic acid probe that binds specifically to a BFLP1698 nucleic acid; and

identifying the bound probe, if present,

thereby detecting the presence of BFLP1698 nucleic acid molecule in said sample.

36. (original) A method of detecting the presence of a BFLP1698 polypeptide in a sample, the method comprising:

contacting the sample with a compound that selectively binds to said polypeptide under conditions allowing for formation of a complex between said polypeptide and said compound; and

detecting said complex, if present, thereby identifying said polypeptide in said sample.

37. (original) The method of claim 36, wherein said compound is rapamycin.

38. (original) The method of claim 36, wherein said compound is an anti-BFLP1698 antibody.

39. (original) A method for determining the presence of or predisposition to lupus nephritis in a subject, the method comprising:

a) measuring the amount of a BFLP1698 nucleic acid molecule in a sample from said subject; and

b) comparing the amount of said nucleic acid in step to the amount of the nucleic acid present in a control sample from a subject without lupus nephritis,

wherein an increase in the level of said BLP1698 nucleic acid in step (a) as compared to the level of the nucleic acid in the control sample indicates the presence of or predisposition to lupus nephritis in said subject.

40. (original) The method of claim 39, wherein said subject is a human.

41. (original) A method for determining the presence of or predisposition to lupus nephritis in a subject, the method comprising:

a) measuring the amount of a BFLP1698 polypeptide in a sample from said subject; and

b) comparing the amount of said polypeptide to the amount of the nucleic acid present in a control sample from a subject without lupus nephritis,

wherein an increase in the level of said BLP1698 polypeptide as compared to the level of the polypeptide in the control sample indicates the presence of or predisposition to lupus nephritis in said subject.

42. (original) The method of claim 41, wherein said subject is a human.

43. (original) A method for screening for a therapeutic agent for treating an autoimmune disorder, the method comprising:

contacting a test compound with a BFLP1698 polypeptide; and

determining if said test compound binds to said BFLP1698 polypeptide,

wherein binding of said test compound to said polypeptide indicates the test compound is a therapeutic agent for an autoimmune disorder.

44. (original) The method of claim 43, wherein said immune disorder is an autoimmune disorder.

45. (original) The method of claim 44, wherein said autoimmune disorder is lupus.

46. (original) The method of claim 44, wherein said autoimmune disorder is lupus lephritis.

47. (original) The method of claim 43, wherein said BFLP1698 is provided in a cell-free extract.

48. (original) The method of claim 43, wherein said BFLP1069 is provided in a cell.

49. (original) A method of treating lupus nephritis in a subject, the method comprising administering to said subject a therapeutically effective amount of an agent that inhibits activity of a BFLP1698 polypeptide in said subject.

50. (original) The method of claim 49, wherein said subject is a human.

51. (original) The method of claim 49, wherein said agent is an anti-BFLP1698 antibody.

52. (original) A pharmaceutical composition comprising an agent that inhibits activity of a BFLP1698 polypeptide in a subject and a pharmaceutically acceptable carrier.

53. (original) The pharmaceutical composition of claim 52, wherein said agent is an anti-BFLP1698 antibody.